



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 29, 2019

Dr. David M. Slaughter  
President and Reactor Administrator  
Aerotest Operations, Inc.  
3455 Fostoria Way  
San Ramon, CA 94583

SUBJECT: AEROTEST OPERATIONS, INC. – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING APPLICATION RE: LICENSE AMENDMENT REQUEST TO PREPARE FOR FUEL STORAGE AND DECOMMISSIONING ACTIVITIES FOR THE AEROTEST RADIOGRAPHY AND RESEARCH REACTOR, FACILITY OPERATING LICENSE NO. R-98. (EPID NO. L-2019-LLA-0065)

Dear Dr. Slaughter:

By letter dated March 21, 2019 (Agencywide Documents Access and Management System Accession No. ML19084A051), Aerotest Operations, Inc. (Aerotest) submitted a license amendment request (LAR) for the Aerotest Radiography and Research Reactor (ARRR) to amend its license and technical specifications. The LAR indicates that the proposed changes are needed to prepare the ARRR for fuel storage and decommissioning activities. The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this LAR. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to begin its detailed technical review. The acceptance review is also intended to identify whether the application has readily apparent information insufficiencies in the characterization of the regulatory requirements or the licensing basis of the facility.

Consistent with Section 50.90, "Application for amendment of license, construction permit, or early site permit," of Title 10 of the *Code of Federal Regulations* (10 CFR), whenever a holder of the license desires to amend the license, an application for an amendment must be filed with the Commission, as specified in 10 CFR 50.4, "Written communications," fully describing the changes desired, and following as far as applicable, the form prescribed for original applications. Section 50.34, "Contents of application; technical information," of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations. Further, Section 50.9, "Completeness and accuracy of information," require that information provided to the Commission by a licensee shall be complete and accurate in all material respects.

The NRC staff requests that Aerotest supplement the application to address the information requested in the enclosure within 30 days from the date of this letter. This will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's request is not received by the above date, the application will not be accepted for review pursuant to 10 CFR 2.101, "Filing of application," and the NRC staff will cease its review activities associated with the application. If the application is subsequently accepted for review, you will be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The supplemental information requested and the associated time frame in this letter was discussed with you on May 16, 2019.

If you have any questions, please contact me at 301-415-0893, or by electronic mail at [Geoffrey.Wertz@nrc.gov](mailto:Geoffrey.Wertz@nrc.gov).

Sincerely,

***/RA Edward Helvenston for/***

Geoffrey A. Wertz, Project Manager  
Research and Test Reactors Licensing Branch  
Division of Licensing Projects  
Office of Nuclear Reactor Regulation

Docket No. 50-228  
License No. R-98

Enclosure:  
As stated

cc: California Energy Commission  
1516 Ninth Street, MS-34  
Sacramento, CA 95814

Radiologic Health Branch  
P.O. Box 997414, MS 7610  
Sacramento, CA 95899-7414

Test, Research and Training  
Reactor Newsletter  
Attention: Amber Johnson  
Dept of Materials Science and Engineering  
University of Maryland  
4418 Stadium Drive  
College Park, MD 20742-2115

SUBJECT: AEROTEST OPERATIONS, INC. – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING ACTION RE: LICENSE AMENDMENT REQUEST TO PREPARE FOR FUEL STORAGE AND DECOMMISSIONING ACTIVITIES FOR THE AEROTEST RADIOGRAPHY AND RESEARCH REACTOR, FACILITY OPERATING LICENSE NO. R-98. (EPID NO. L-2019-LLA-0065) DATE: MAY 29, 2019

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**ADAMS Accession No. ML19108A478**

**\*concurring via email**

**NRR-088**

OFFICE	NRR/DLP/PRLB/PM*	NRR/DLP/PRLB/LA*	NRR/DLP/PROB/BC	NRR/DLP/PRLB/ABC	NRR/DLP/PRLB/PM*
<b>NAME</b>	GWertz	NParker	AMendiola	WKennedy	GWertz (Helvenston <i>for</i> )
<b>DATE</b>	4/22/19	4/19/19	5/28/19	5/28/19	5/29/19

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OFFICE OF NUCLEAR REACTOR REGULATION

SUPPLEMENTAL INFORMATION NEEDED FOR

LICENSE AMENDMENT REQUEST

AEROTEST RADIOGRAPHY AND RESEARCH REACTOR

LICENSE NO. R-98; DOCKET NO. 50-228

1. By letter dated January 25, 2019 (Agencywide Documents Access Management System (ADAMS) Accession No. ML19015A332), the U.S. Nuclear Regulatory Commission (NRC) staff provided a response to the Aerotest letter dated December 6, 2018 (ADAMS Accession No. ML18344A049), which requested that Aerotest provide written certification that operation of the reactor had permanently ceased. Although the license amendment request (LAR) states that the Aerotest letter “declared the permanent cessation of operation for the [Aerotest Radiography and Research Reactor] ARRR (R-98),” the NRC staff review of the December 6, 2018, letter finds no such declaration. Given that the proposed changes described in the LAR reflect a reactor that has permanently ceased operation, provide a declaration of cessation of operation of the ARRR, including the effective date.
2. The LAR states, “The proposed changes are listed in Enclosure 2; included with a proposed change is its location in the document and basis for the altered text.” The NRC staff reviewed Enclosure 2 and finds that the exact changes to the text of the license and technical specifications (TSs) being requested are not completely clear. Additionally, the NRC staff reviewed Enclosure 3, and finds that it appears to contain revision markings (in the right-side margin) from previous amendments, and it does not appear to contain revision markings for the proposed changes in this LAR. As such, it is difficult for the NRC staff to ascertain the complete scope of the proposed changes. In order to better ensure that the NRC staff has a complete understanding of every proposed change, it is recommended that a markup of the proposed changes to the current license and TSs be provided. A simple hand-written markup is sufficient indicating the text being deleted (strikeout) and text being added (hand-written). Only the license and TS pages containing proposed changes need to be submitted. Recent submittals which may be useful as examples can be found in ADAMS Accession Nos.: ML18109A039 (Enclosure 3) and ML19053A521 (Attachment 2).
3. The LAR states, “The proposed changes are listed in Enclosure 2; included with a proposed change is its location in the document and basis for the altered text.” The NRC staff reviewed Enclosure 2 and finds that the bases for some of the proposed changes lack sufficient information for the NRC staff to perform an independent evaluation. Further, NRC staff finds that a justification for each proposed change is not provided. In order for the NRC staff to evaluate the acceptability of each proposed change, provide a justification of why the change is needed and a basis describing why the change is acceptable. A recent submittal which may be useful as an example can be found in ADAMS Accession No. ML18109A039.
4. The LAR states that the capabilities of licensed operators are no longer needed, and the senior reactor operators (SROs) and reactor operators (ROs) will be replaced by certified fuel handlers (CFHs). Given that fuel will remain in possession at the facility, the NRC staff

must understand how the fuel will be safely managed with CFHs replacing SROs/ROs. The NRC staff review of the LAR did not find a sufficient justification for replacing SROs/ROs with CFHs. The NRC staff would like to understand which activities currently performed by SROs/ROs will no longer be required as a result of the proposed LAR. Further, the NRC staff would like to know if any changes are needed to the ARRR Safety Analysis Report, Physical Security Plan, or Emergency Plan as a result of the proposed LAR. Additionally, the NRC staff reviewed the proposed TSs (in Enclosure 3) and it appears that many of the TSs associated with operation of the reactor could no longer be performed without SROs/ROs, and questions whether removing the extraneous TSs was considered in the LAR preparation. In addition, indicate if the proposed ARRR CFH Training/Requalification Program, provided as Enclosure 4, was developed based a previously NRC-approved CFH training and requalification program from another licensed facility.

Furthermore, it appears that the intent of the proposed LAR is similar to a possession-only LAR. Sections 17.2, "Possession-Only License Amendment," of Parts 1 and 2 of NUREG-1537, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors" (ADAMS Accession Nos. ML042430055 and ML042430048, respectively), provide guidance for applicants to prepare, and for the NRC staff to review, an application for a possession-only license amendment. If a possession-only license amendment would be useful for the facility to store fuel prior to decommissioning, the NRC guidance in NUREG-1537 will help to ensure that your application will be complete and provide the NRC staff the necessary information to perform its independent evaluation. An example which can be useful to provide additional information for a possession-only licensing action can be found in the NRC issuance of License Amendment No. 11 for the Worcester Polytechnic Institute research reactor, dated August 26, 2008 (ADAMS Accession No. ML081500506).